# ADDITIONS TO DESCRIPTIONS OF NEW OLETHREUTINAE AND CARPOSINIDAE IN THE BRITISH MUSEUM (NATURAL HISTORY)

*By* A. DIAKONOFF

In 1950 I described ten new species of South Asiatic Olethreutinae and Carposinidae in the *Bull. Brit. Mus.* (*Nat. Hist.*), *Ent.* **1** : 273–300, Pls. 3–8, text-figs. 1–2. The types of the species were deposited in the British Museum (Natural History). At that time I was not able to give illustrations to the descriptions, except for figures of the genitalia of two species, viz., of *Bactra coronata* Diak. and *B. monochorda* Diak.

Now at last, after a long delay, I am able to carry my original intention into effect, and publish the illustrations of the other eight species, together with descriptions and figures of their genitalia.

I am indebted to Mr. J. D. Bradley, Department of Entomology, British Museum (Natural History), London, for his kind interest and help with this study.

Some corrections have become necessary since the publication of my paper. A new genus is proposed below for the reception of one species of the Carposinidae, and two other species of this family are transferred to other genera, described since. The attribution of the three Olethreutinae to the genus *Acroclita* Lederer is somewhat dubious, and may remain so till a basic revision of the South Asiatic genera of the subfamily is carried out, which is my intention. Neither am I sure of the combination of the male and the female of *Acroclita lithoxoa* Diak : they might prove to belong to different species.

### 1. *Acroclita argyrophenga* Diak.

(Pl. 5, fig. 1 ; Pl. 7, fig. 13)

(*tom. cit.*, p. 276)

Female genitalia. Eighth segment distinctly sclerotized; ventrite with a deep split, ending with an oval excision encircling ostium bursae. The ostium with a hyaline ventral wall, with the rim produced into a short, triangular lip, encircled by an annular, thickened, and sclerotized structure, open dorsally. Colliculum strongly sclerotized, short, irregular. Corpus bursae pear-shaped, upper edge with an inverted V-shaped ridge. Signa moderate, slender hooks on small round basal plates. (Male cornuti present, small and slender blades.) (Slide No. 2758, holotype.)

Note. The holotype specimen is a female, not a male as stated in the original description.

2. ***Acroclita falcigera*** Diak.

(Pl. 5, fig. 2 ; Pl. 8, figs. 16, 17)

(*tom. cit.*, p. 278)

FEMALE GENITALIA. Eighth segment sclerotized. Sterigma modified, being a semi-oval plate, rounded below (rostrally), twice emarginate above (caudally). Ostium bursae, a transverse-triangular split, with a produced and emarginate ventral rim. Colliculum short, strong, subglobular, finely denticulate on the two sides above. Corpus bursae large, pear-shaped, with an inverted V-shaped sclerotization above. Signa, two aciculate spikes, one flattened, with two sharp edges, another with three. (Slide No. 2756.)

3. ***Acroclita lithoxoa*** Diak.

(Pl. 5, figs. 3, 4 ; Pl. 7, figs. 12, 14)

(*tom. cit.*, p. 278)

MALE GENITALIA. Tegumen slender, triangularly depressed. Uncus, a weak slender conus. Socius moderate. Tuba analis large and wide. Gnathos a slender, undulate band. Vinculum represented by an elongate, semi-ellipsoid sclerite on each side, interconnected mesially, and apparently articulating there. Valva simple, rather broad, cucullus obliquely rounded and bristly, with a row of small marginal thorns towards dorsal angle. Juxta small, caulis rather short. Aedeagus moderate, cornuti a sheaf of slender sinuate spines. (Slide No. 2755, holotype.)

FEMALE GENITALIA. Eighth segment not sclerotized. Ostium bursae shaped as an elongate, longitudinal body, narrowed in middle and dilated at extremities, densely scaled (scales removed in mount) ; upper extremity of this body representing the ostium bursae proper, thickened, aciculate, supported by a subapical annular band. Colliculum strongly sclerotized, an irregular tube with several longitudinal folds. Corpus bursae pear-shaped, its wall modified (submalleate). Signa, two slender, little-curved hooks, with rather large, ill-defined basal plates. (Slide No. 2757, allotype.)

4. ***Blipta drachmophora*** (Diak.) comb. nov.

(Pl. 6, fig. 8 ; Pl. 8, fig. 15)

*Meridarchis drachmophora* Diak., 1950, *tom. cit.* 298.

The present species is transferred to the genus *Blipta* Diakonoff, 1954 (*Verh. Ned. Akad. Wet., Nat.* (2) **49**, No. 4 : 156) because of the close similarity of the male genitalia, and in spite of the following minor discrepancies of the external structure along with the more pronounced differences in the neuration of the hind wing. The following particulars should be added to the description of the genus *Blipta*.

Labial palpus with median segment more rough in middle of upper and lower edges; terminal segment shorter than in the type of the genus. Fore wing with

veins 3 and 4 very closely approximated at base, almost connate; veins 8 and 9 closely approximated and contiguous along basal portion. Hind wing with veins 3 and 4 connate from angle; 5 and 6 absent; 7 to apex.

MALE GENITALIA. Tegumen rather high. Socius present in the shape of a large, lateral flap of tegumen, with a rounded process, directed caudad; the flap edged throughout by a dense fringe of bristles. Uncus strong, shaped as a bird's head, rounded and with a ventral beak. Vinculum long, triangularly projecting. Valva with a short disc and a very narrow, long cucullus; sacculus distinct, at apex projecting with a strong, blunt and sclerotized point; harpe, a moderate, slender, sclerotized, free arm, situated below base of costa of the valva, bristly at the top. Aedeagus broadly spoon-shaped, right side produced into a pointed blade, folded over disc, with a bristled subapical process on the inner side. (Slide No. 2749, holotype.)

### 5. ***Mesodica dryas*** (Diak.) comb. nov.

(Pl. 6, figs. 10, 11; Pl. 9, figs. 20, 21; Pl. 10, figs. 23, 24)

*Meridarchis dryas* Diak., 1950, *tom. cit.* 298.—Diakonoff, 1949, *Treubia*, **20** : 43.

MALE GENITALIA. Tegumen broad. Uncus, a long, little-curved, slender hook. Gnathos robust, two curved, pending arms, connected in middle, with ventral edge aciculate; behind (dorsally) the connection, a semi-oval transverse sclerite. Valva oval, broad, semi-membranous, densely long-haired on the outer side (hairs removed in mount), basal external portion of valva forming a semicircular lobe, serving as attachment for a dense tuft of long hairs; a remarkable and interesting development are the coremata on the ninth segment, visible on the right side of the photograph; base of sacculus sclerotized, forming a short, marginal rod ending in a transverse flattened process (harpe). Vinculum rather strong, dilated. Aedeagus spoon-shaped, deeply bicuspidate, right cusp slender, each cusp edged on both sides by a fringe of strong bristles; left cusp also with two longitudinal groups of bristles in the middle, viz., short spines at the left side, long spines at the right. (Slide No. 2752, holotype.)

FEMALE GENITALIA. Eighth segment forming a sclerotized double ring. Sterigma and ostium bursae not modified. Ductus bursae, a weak tube with a finely verrucose wall. Corpus bursae simple, tubular. Signa absent. (Slide No. 2753, allotype.)

Note. The species is extremely close to *Mesodica infuscata* Diak., from Java, described in *Treubia*, **20** : 43, 1949. In that paper I also referred to the present species, a description of which was in press at the time. *M. dryas* differs from *infuscata* by the slightly different shape of the gnathos and by the presence of sclerotizations along the base of the sacculus in the former species, while a discal harpe is absent. Also the aedeagus in *dryas* has a different shape.

It may be mentioned that the description of the gnathos in *infuscata* (l.c.: 44) is not quite correct, as the gnathos in that species is also entire and not paired.

6. ***Meridarchis ensifera*** Diak.

(Pl. 6, fig. 9 ; Pl. 9, figs. 18, 19)

(*tom. cit.*, 298)

FEMALE GENITALIA. Ostium bursae concealed behind a large semi-oval membranous plate. Sterigma shaped as a smaller, submembranous, wrinkled body. Ductus bursae, a rather broad tube, with a verruculose wall. Corpus bursae simple, tubular anteriorly, abruptly dilated and pear-shaped posteriorly. Signa absent. (Slide No. 2750, holotype.)

FIG. 1. *Peragrarchis rodea* (Diak.) gen. nov., ♂, sketch of the head and the wing neuration

***PERAGRARCHIS*** gen. nov.

(Text-figs. 1, 2 ; Pl. 5, fig. 7)

Head with appressed scales, with rough tufts on vertex. Antenna 3/4, long-ciliate in male, ciliations 3, fine. Ocellus posterior. Proboscis weak. Labial palpus strongly ascending, palpi slightly divergent; median segment dilated in middle by rough scales above and beneath ; terminal segment exposed, rather short, thick, rounded. Thorax without a crest. Abdomen normal. Posterior tibia with loose, fine and long hairs.

Fore wing with tufts of raised scales on surface ; with vein 2 from near angle, 3 and 4 closely approximated at base, from angle, 8 and 9 stalked, 10 from 3/4 of upper edge of cell, 11 absent. Hind wing with a cubital pecten ; vein 2 from towards angle, 3 and 4 connate from angle, 5 absent, 6 weak, parallel to 7, 7 to apex.

MALE GENITALIA. Uncus simple, pointed. Socius parietal. Saccus developed. Valva with a short disc and a strong sacculus ending in a dentate transverse blade

in a round impression ; cucullus bipartite to the base, arms long and narrow. Aedeagus very long, slender, dilated below middle ; point asymmetrical, acute.

Type of the genus : *Meridarchis rodea* Diakonoff, 1950, ♂.

A development of *Meridarchis* Zeller, 1867 ; very distinct by reason of the peculiar bipartite cucullus in the male and the absence of vein 11 in the fore wing.

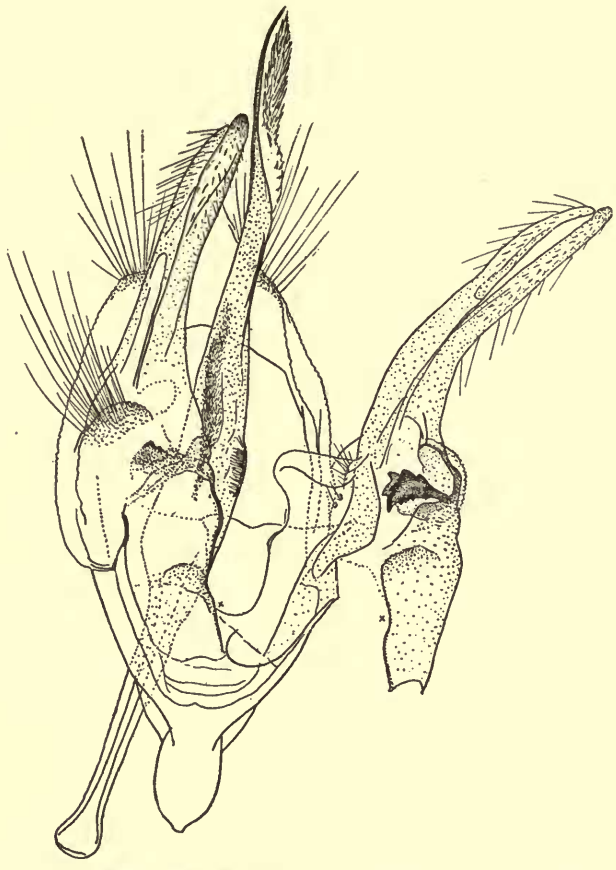

FIG. 2. *Peragrarchis rodea* (Diak.) gen. nov., male genitalia.

### 7. ***Peragrarchis rodea*** (Diak.) comb. nov.

(Text-figs. 1, 2 ; Pl. 5, fig. 7)

*Meridarchis rodea* Diak., 1950, *tom. cit.* 299.

MALE GENITALIA. Tegumen high, triangular. Uncus moderate, conical, pointed. Socius represented by a group of long bristles, implanted on the shoulder of the tegumen (" parietal "). Vinculum strong, with an elongate-oval saccus. Valvae fused along the basal portion of sacculi (loosened in mount ; marked in the figure by a ×), sclerotized ; sacculus with a blunt, minutely denticulate, subapical ridge

at apex, with a sclerotized, round excavation from which rises a transverse, dentate blade; cucullus sclerotized, bipartite to the base, halves linear; a submembranous, verruculose, rounded tumescence bearing a pencil of hairs on the outer side of valva, opposite base of sacculus. Aedeagus long and slender, moderately sclerotized, dilated before middle; with two longitudinal patches of spines, right series short, with stout spines, left long, with several rows of small spines; apex asymmetrical, acute, with a subapical, dense patch of moderate spines. (Slide No. 2751, holotype.)

### 8. ***Picrorrhyncha atribasis*** Diak.

(Pl. 5, figs. 5, 6; Pl. 10, fig. 22)

(*tom. cit.*, 300)

Female genitalia. Ostium bursae a simple, membranous, truncate tube, with a subapical, inverted-V-shaped sclerite in ventral wall. Ductus bursae long, less than its upper half, with a broad and strong cestum, curved-up at the end; ductus bursae beyond this (as far as corpus bursae) with verrucose wall containing roundish impressions. Corpus bursae simple, egg-shaped, with a long and narrow collum. Signa absent. (Slide No. 2754, holotype.)

The abdomen of the male allotype specimen was already missing at the time of the original description.

PLATE 5

Fig. 1. *Acroclita argyrophenga* Diak., holotype ♀.
Fig. 2. *A. falcigera* Diak., holotype ♀.
Fig. 3. *A. lithoxoa* Diak., holotype ♂.
Fig. 4. The same, allotype ♀.
Fig. 5. *Picrorrhyncha atribasis* Diak., holotype ♀.
Fig. 6. The same, allotype ♂.
Fig. 7. *Peragrarchis rodea* (Diak.), holotype ♂.

MUSEUM
SEP 1959